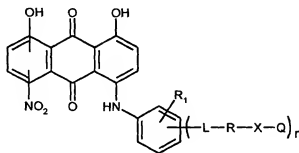


We claim:

1. An anthraquinone colorant having the structure in Formula I:

5

10



I

wherein

15

L represents a covalent carbon-carbon bond or a linking group selected from the group consisting of -O-, -S-, -SO₂-, -CON(R₂)-, -N(COR₃)-, -N(R₂)CO-, and -N(SO₂R₃)-;

R is a divalent organic radical selected from the group consisting of C₁-C₆-alkylene; C₁-C₆-alkylene-Y-CH₂CH₂-; and {CH₂CH₂}_m-Y-CH₂CH₂-;

20

R₁ is hydrogen or represents one or two groups selected from the group consisting of C₁-C₆-alkyl, C₁-C₆-alkoxy and halogen.

R₂ is hydrogen, C₁-C₆-alkyl, C₃-C₈-cycloalkyl or aryl;

R₃ is C₁-C₆-alkyl, C₃-C₈-cycloalkyl or aryl;

X is -O- or -N(R₂)-;

25

Y is -O-, -S-, -SO₂-, -N(SO₂R₃)-, or -N(COR₃)-;

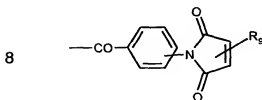
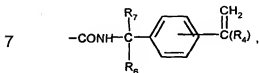
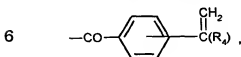
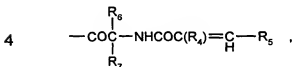
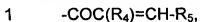
n is 1 or 2;

m is 2 or 3; and

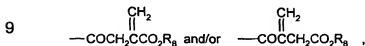
Q is an ethylenically-unsaturated photopolymerizable or free radical polymerizable group.

30

2. A colorant according to claim 1 wherein Q is



or



wherein:

R_4 is hydrogen or C_1-C_6 -alkyl;

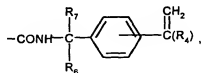
- 5 R_5 is hydrogen; C_1-C_6 alkyl; phenyl; phenyl substituted with one or more groups selected from the group consisting of C_1-C_6 -alkyl, C_1-C_6 -alkoxy, $-\text{N}(\text{C}_1-\text{C}_6\text{-alkyl})_2$, nitro, cyano, C_1-C_6 -alkoxycarbonyl, C_1-C_6 -alkanoyloxy and halogen; 1- or 2-naphthyl; 1- or 2-naphthyl substituted with C_1-C_6 -alkyl or C_1-C_6 -alkoxy; 2- or 3-thienyl; 2- or 3-thienyl substituted with C_1-C_6 -alkyl or halogen; 2- or 3-furyl; or 2- or 3-furyl substituted with C_1-C_6 -alkyl;
- 10

R_6 and R_7 are, independently, hydrogen, C_1 - C_6 -alkyl, or aryl; or R_6 and R_7 may be combined to represent a $-(CH_2)_{3-5}$ radical;

R_8 is hydrogen, C_1 - C_6 -alkyl, C_1 - C_8 -alkenyl, C_3 - C_8 -cycloalkyl or aryl; and

5 R_9 is hydrogen, C_1 - C_6 -alkyl or aryl.

3. A colorant according to claim 2, wherein R is C_1 - C_4 -alkylene, R_1 is hydrogen, L is $-O-$ or a covalent bond, X is $-O-$, and Q is

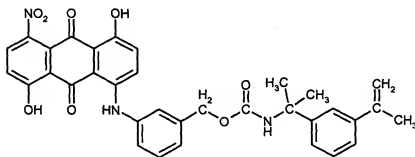


10 wherein R_4 is hydrogen or methyl, R_6 and R_7 are methyl, and n is 1.

4. A colorant according to claim 2, wherein R is C_1 - C_4 -alkylene, R_1 is hydrogen, L is $-O-$ or a covalent bond, X is $-O-$, and Q is $-COC(R_4)=CH-R_5$, wherein R_4 is hydrogen or methyl, R_5 is hydrogen, and n is 1.

15

5. A colorant according to claim 1 having the structure

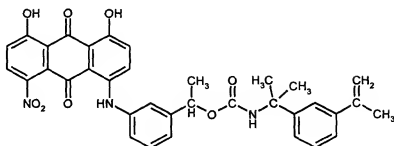


20

25

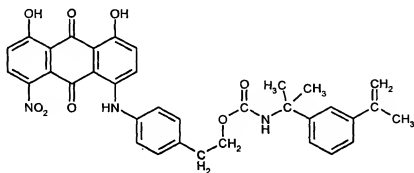
6. A colorant according to claim 1 having the structure

5



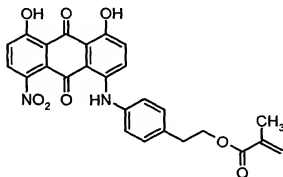
7. A colorant according to claim 1 having the structure

15



8. A colorant according to claim 1 having the structure

20



9. A coating composition comprising (i) one or more polymerizable vinyl compounds, (ii) one or more colorant compounds according to Claim 1, and (iii) at least one photoinitiator.
- 5 10. A coating composition according to Claim 9 comprising (i) one or more polymerizable vinyl compounds, (ii) one or more of the colorant compounds present in a concentration of about 0.5 to 25 wt% based on the weight of component (i), and (iii) a photoinitiator present in a concentration of about 1 to 15 wt% based on the weight of the polymerizable vinyl
10 compound(s) present in the coating composition.
11. A coating composition according to claim 10 which further comprises one or more organic solvents.
- 15 12. A coating composition according to claim 10 wherein the composition is dispersed in water.
13. A coating composition according to claim 12 which further comprises a co-solvent.
- 20 14. A coating composition according to Claim 10 wherein the polymerizable vinyl compounds comprise methacrylated polyesters, acrylated or methacrylated polyethers, acrylated or methacrylated epoxy polymers, acrylated or methacrylated urethanes, or mixtures thereof, in a diluent comprising monomeric acrylate or methacrylate esters.
- 25 15. A colorant concentrate comprising a solvent and a colorant according to Claim 1 at a concentration of about 0.5 to about 40 wt%.

16. A colorant concentrate according to claim 15 wherein the solvent is toluene, methylethyl ketone, acetone, hexanediol diacrylate, tri(propyleneglycol) diacrylate or a mixture thereof and the colorant is present at a concentration of about 10 to about 30 wt%.

5

17. A colorant concentrate according to claim 16 further comprising one or more ultraviolet light absorbing compounds at a concentration of from about 0.1 to about 30 wt %.

10 18. A colorant concentrate according to claim 16 further comprising one or more antioxidants at a concentration of about 0.01 to about 5 wt %.

15